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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,317	03/05/2002	Michael Johannes Franciscus Maria Verhaak	2001-1019	3130

466 7590 05/20/2004

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EXAMINER

STRICKLAND, JONAS N

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/070,317	Applicant(s) VERHAAK, MICHAEL JOHANNES FRANCISCUS MA	
	Examiner Jonas N. Strickland	Art Unit 1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Detailed Action is in response to the amendment filed on 3/02/2004. The amendment to the specification has been approved. Claims 1-8 have been cancelled and claims 9-26 are currently pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 9-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Li et al. (US Patent 5,149,512).

Applicant claims a method for the selective catalytic reduction of nitrous oxide in the presence of a solid catalyst, with the addition of a saturated hydrocarbon as a reducing agent, characterized in that the catalyst used is a promoted iron-containing zeolite with at least one precious metal selected from the group consisting of ruthenium, rhodium, palladium and gold.

Li et al. discloses a catalytic reduction process for the reduction of nitrogen oxides using methane in the presence of oxygen. Li et al. continues to disclose wherein methane serves as a reducing agent and the catalyst is a promoted iron-containing zeolite. The catalyst may also be promoted with a precious metal, such as rhodium (see abstract). Li et al. continues to disclose wherein the catalyst may be exchanged

with palladium, as well as ruthenium (col. 7, lines 1-8). The term NO_x includes nitrous oxide (col. 3, lines 56-58). The methane/NO_x ratio ranges from 0.2 to 10 (col. 8, lines 27-37). The process is carried out at a temperature of about 250°C and pressures between about 1 and 300 atmospheres (col. 8, lines 18-26). Since, Li et al. discloses the same process, it would have been inherent and anticipated to achieve the emission of carbon monoxide and of the hydrocarbon being less than 100 ppmv, which also reads on zero. Li et al. continues to disclose wherein it is known to use a combination of reducing agents (col. 7, lines 1-8 and col. 10, lines 33-41).

Response to Arguments

4. Applicant's arguments filed 3/2/04 have been fully considered but they are not persuasive.

Applicant argues that Li et al. fails to disclose an iron-containing zeolite promoted with a precious metal, such as ruthenium, rhodium, palladium and gold. However, it should be noted that Li et al. continues to disclose wherein methane serves as a reducing agent and the catalyst is a promoted iron-containing zeolite. The catalyst may also be promoted with a precious metal, such as rhodium (see abstract). Li et al. continues to disclose wherein the catalyst may be exchanged with palladium, as well as ruthenium (col. 7, lines 1-8). This disclosure meets the instant claim limitations.

Furthermore, with respect to Applicant's argument that nitrous oxide is not included in the NO_x gases as disclosed by Li et al. The term NO_x includes nitrous oxide (col. 3, lines 56-58). The disclosure by Li et al. meets the instant claim limitations.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonas N. Strickland whose telephone number is 571-272-1359. The examiner can normally be reached on M-TH, 7:30-5:00, off 1st Friday.

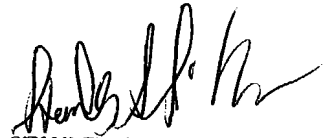
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1754

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonas N. Strickland
May 13, 2004



STANLEY S. SILVERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700